APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/410,511	09/30/1999	DARRELL SHIVELY	CISCO-1372	6966

7590   05/22/2002

DAVID B RITCHIE
D'ALESSANDRO AND RITCHIE
P O BOX 640640
SAN JOSE, CA   951640640

EXAMINER
BLAIR, DOUGLAS B

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 05/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No. 09/410,511	Applicant(s) SHIVELY ET AL.
	Examiner Douglas B Blair	Art Unit 2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 September 1999</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-50</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-50</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4-8</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Claim Objections

1.   Claim 19 is objected to because of the following informalities: the word county in the second line of the claim does not make sense, the word identifications should not be plural in the fifth line of the claim, and the word used does not make sense in the fifth line. For examination purposes it is assumed that the applicant meant to use the word count instead of county, meant to use identification instead of identifications, and meant to use the word user instead of used. Appropriate correction is required.

2.   Claim 46 is objected to because of the following informalities: in the seventh line of the claim there is a missing word after "the". For examination purposes it will be assumed that the word "user" was omitted from the sentence. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-6, 17, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,253,236 to Troxel et al. and in further view of U.S. Patent Number 6,314,408 to Salas et al..

6.   As to claim 1, Troxel teaches a server of a data communications network keeping a count of the sessions used at a given time by a group of users to correct said count to compensate for

abnormal disconnections of users belonging to said group (col. 5, lines 20-41); however Troxel does not explicitly teach a method of assigning unique identification values, a method for maintaining a master list of unique identification values logged in, or a method of responding to a new user's attempt to log in.

Salas teaches a method for server access comprising: assigning unique identification values (UIVs) to each user logged in at a port of a network access server (col. 3, lines 1-22); maintaining a master list of UIVs associated with logged in users and their respective group identification information (col. 3, lines 1-22); responding to a new user's attempt to log in to the data communications network by checking to see if the UIV of the new user is already in the master list, and if it is, clearing the entry in the master list and entering the new user's UIV and group identification information in the master list (col. 19, lines 21-40).

It would have been obvious one of ordinary skill in the art of Computer Networking to combine the teachings of Troxel and Salas to keep count of server users in particular groups because restricting server access based on group membership would provide more functionality for the administering of the server.

7.   As to claim 2, Troxel teaches a method of responding further comprising: decrementing a counter associated with a group associated with the UIV of the cleared entry (col. 9, lines 51-55); and incrementing a counter associated with a group associated with the UIV of the new user (col. 5, lines 20-41).

8.   As to claim 3, Troxel teaches a method comprising: rejecting the new user's attempt to log in to the data communications network if the log in would cause a counter associated with a

group to which the new user belongs to exceed a predetermined number of maximum sessions (col. 10, lines 27-41).

9.   As to claim 4, it provides the same matter as claim 3 and is thus rejected on the same basis as claim 3.

10.   As to claim 5, Troxel teaches a method further comprising: allowing the new user's attempt to log into the data communications network if the log in would not cause a counter associated with a group to which the new user belongs to exceed a predetermined number of maximum sessions (col. 10, lines 27-41).

11.   As to claim 6, it provides the same matter as claim 5 and is thus rejected on the same basis as claim 5.

12.   As to claim 17, it has similar limitations to claim 1 and is thus rejected on the same basis.

13.   As to claim 29, Salas mentions the use of a database for storing the user information (col. 2, lines 43-56). The rest of the matter in claim 29 has similar limitations to claim 1 and is thus rejected on the same basis.

14.   As to claims 30-32, they have similar limitations to claim 2 and are thus rejected on the same basis.

15.   As to claim 33, it has similar limitations to claim 3 and is thus rejected on the same basis.

16.   Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Troxel in view of Salas as applied to claims 1-6 above, and further in view of U.S. Patent Number 6,377,982 to Rai et al..

17.   As to claim 7, Troxel teaches a system with unique identifications for each user (col. 10, lines 27-41); however, Troxel does not explicitly teach the method of forming unique

identification values based on the port identification associated with the port and from a NAS identification associated with the NAS.

Rai teaches a method of sending access information to a server that includes the NAS port and NAS IP address (col. 25, lines 29-57, The IP address serves as a unique identification for the NAS.).

It would have been obvious to one of ordinary skill in the art of Computer Networking at the time of the invention to form unique identification using the port identification number and the NAS identification by combining the teachings of Troxel, Salas, and Rai because both values are known and together they can provide a unique identification for each user of the server.

18.   As to claims 8-12, they provide the same matter as claim 7 and are thus rejected on the same basis as claim 7.

19.   Claims 13, 18, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,243,716 to Waldo et al. in further view of Salas.

20.   As to claim 13, Waldo teaches a method for a resource control server of a data communications network to keep a count of a particular resource used at a given time by a group of users to correct said count to compensate for abnormal disconnections of users belonging to said group (col. 6, lines 8-21); however, Waldo does not explicitly teach a method of assigning unique identification values, a method for maintaining a master list of unique identification values logged in, or a method of responding to a new user's attempt to log in.

Salas teaches a method comprising: assigning unique identification values (UIVs) to each user logged in at a port of a network access server (col. 3, lines 1-22); maintaining a master list of UIVs associated with logged in users and their respective group identification information

(col. 3, lines 1-22); responding to a new user's attempt to log in to the data communications network by checking to see if the UIV of the new user is already in the master list, and if it is, clearing the entry in the master list and entering the new user's UIV and group identification information in the master list (col. 19, lines 21-40).

It would have been obvious to one of ordinary skill in the Computer Networking art to combine the teachings of Waldo and Salas to count the resources used by a group because restricting resource use based on group membership would provide more functionality for the administering of the server.

21.   As to claim 18, it has similar limitations to claim 13 and is rejected on the same basis.

22.   As to claim 38, Salas mentions the use of a database for storing the user information (col. 2, lines 43-56). The rest of the matter in claim 38 has similar limitations to claim 13 and is thus rejected on the same basis.

23.   Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo in view of Salas as applied to claim 13 above, and further in view of Troxel.

24.   As to claim 14, Troxel teaches a method of responding further comprising: decrementing a counter associated with a group associated with the UIV of the cleared entry (col. 9, lines 51-55); and incrementing a counter associated with a group associated with the UIV of the new user (col. 5, lines 20-41).

25.   Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo in view of Salas as applied to claim 13 above, and further in view of Rai and Troxel.

26.   Claim 15 provides the same matter as claim 7 and is thus rejected on the same basis as claim 7.

27.   Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo in view of

Salas and Troxel as applied to claim 14 above, and further in view of Rai.

28.   Claim 16 provides the same matter as claim 7 and is thus rejected on the same basis as

claim 7.

29.   Claims 19-22, 27, and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Troxel in view of Salas and in further view of U.S. Patent Number 5,542,047 to Armstrong.

30.   As to claim 19, Troxel teaches a server of a data communications network keeping a

count of the sessions used at a given time by a group of users to correct said count to compensate

for abnormal disconnections of users belonging to said group (col. 5, lines 20-41); however

Troxel does not explicitly teach a method of assigning unique identification values, a method for

maintaining a master list of unique identification values logged in, periodically checking an

access server, or a method of responding to a new user's attempt to log in.

Salas teaches a method for server access comprising: assigning unique identification

values (UIVs) to each user logged in at a port of a network access server (col. 3, lines 1-22);

maintaining a master list of UIVs associated with logged in users and their respective group

identification information (col. 3, lines 1-22); responding to a new user's attempt to log in to the

data communications network by checking to see if the UIV of the new user is already in the

master list, and if it is, clearing the entry in the master list and entering the new user's UIV and

group identification information in the master list (col. 19, lines 21-40).

Armstrong teaches a method of periodically checking the status of network nodes (col. 6,

lines 20-26) and responding to the non-operational status of a node by removing information for

a master list (col. 9, lines 58-67).

It would have been obvious to anyone of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Troxel, Salas, and Armstrong because enhancing a session control server with periodic status checking increases the functionality of the system.

31.   As to claim 20, Armstrong teaches the method wherein said periodically checking is performed by a server (col. 6, lines 20-26).

32.   As to claim 21, Armstrong teaches a method of transmitting a communication to another server on the data communications network to inform it of the non-operational status of a network access server (col. 9, lines 38-47).

33.   As to claim 22, Armstrong teaches a method of receiving a communication from another server on the data communication network advising of the non-operational status of an access server (col. 9, lines 58-67); responding to said communication by removing all unique identification values associated with the non-operational access servers from said master list (col. 6, lines 21-26); however, Armstrong does not explicitly teach decrementing the count of the sessions used by the number of unique identification values removed from said master list.

Troxel teaches a method of decrementing a count of sessions (col. 9, lines 51-55).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Armstrong and Troxel to send out server status and update records accordingly because having a current list of active user indentifications is a useful server function.

34.   As to claim 27, it has similar limitations to claim 19 and is rejected on the same basis.

35.   As to claim 34, Troxel and Salas teach the invention as claimed in claims 29-33;

however, they do not explicitly teach a method of checking and clearing a non-operational node.

Armstrong teaches a method of detecting a non-operational node and clearing it from the

information in the database (col. 6, lines 21-26).

It would have been obvious to one of ordinary skill in the art of Computer networking to

combine the teachings of Troxel, Salas, and Armstrong to create a server system that checks for

and removes information about non-operational nodes because such nodes could cause

confusion.

36.   As to claims 35 and 36, they have similar limitations to claims 21 and 22 respectively and

are thus rejected on the same basis as claims 21 and 22.

37.   As to claim 37, it has similar limitations to claim 34 and is thus rejected on the same

basis as claim 34.

38.   Claims 23-25, 28, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Waldo in further view of Salas and Armstrong.

39.   As to claim 23, Waldo teaches a method for a resource control server of a data

communications network to keep a count of a particular resource used at a given time by a group

of users to correct said count to compensate for abnormal disconnections of users belonging to

said group (col. 6, lines 8-21); however, Waldo does not explicitly teach the rest of the matter in

claim 23.

Salas teaches a method comprising: assigning unique identification values (UIVs) to each

user logged in at a port of a network access server (col. 3, lines 1-22); maintaining a master list

of UIVs associated with logged in users and their respective group identification information

(col. 3, lines 1-22); responding to a new user's attempt to log in to the data communications network by checking to see if the UIV of the new user is already in the master list, and if it is, clearing the entry in the master list and entering the new user's UIV and group identification information in the master list (col. 19, lines 21-40).

Armstrong teaches a method of periodically checking the status of network nodes (col. 6, lines 20-26) and responding to the non-operational status of a node by removing information for a master list (col. 9, lines 58-67).

It would have been obvious to anyone of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Waldo, Salas, and Armstrong because enhancing a session control server with periodic status checking increases the functionality of the system.

40.   As to claim 24 and 25, they have similar limitations to claims 20 and 21 respectively and are thus rejected on the same basis.

41.   As to claim 28, it has similar limitations to claim 23 and is thus rejected on the same basis.

42.   Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo, Salas, and Armstrong as applied to claim 25 above, and further in view of Troxel.

43.   Armstrong teaches a method of receiving a communication from another server on the data communication network advising of the non-operational status of an access server (col. 9, lines 58-67); responding to said communication by removing all unique identification values associated with the non-operational access servers from said master list (col. 6, lines 21-26);

however, Armstrong does not explicitly teach decrementing the count of the sessions used by the number of unique identification values removed from said master list.

Troxel teaches a method of decrementing a count of sessions (col. 9, lines 51-55).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Armstrong and Troxel to send out server status and update records accordingly because having a current list of active user indentifications is a useful server function.

44.   As to claims 42-45, they have similar limitations to claims 34-37 and are thus rejected on the same basis as claims 34-37.

45.   Claims 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo in view of Salas as applied to claim 38 above, and further in view of Troxel.

46.   As to claims 39-41, they have similar limitations to claim 14 and are thus rejected on the same basis as claim 14.

47.   Claims 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armstrong in view of Salas and Troxel.

48.   As to claim 46, Armstrong teaches a server to detect hardware or communication failures at an access server or at a particular port on an access server, said method comprising having an associated server automatically checking on a periodic time basis to determine if the access server does fail to communicate (col. 6, lines 20-26); however Armstrong does not teach the methods of maintaining a master list of unique identification numbers, responding to a user's attempt to log in, removing the unique identification number from the master list, decrementing a

session counter, removing all unique identification numbers, and decrementing a session counter

on access server failure.

Salas teaches a method for a session server to maintain a master list of unique

identification numbers associated with each logged in user (col. 3, lines 1-22); responding to a

user's attempt to log into the data communications network by checking to see if the unique

identification number associated with the user is already on the master list; removing the unique

identification number from the master list do various circumstances (col. 19, lines 21-40).

Troxel teaches a method of decrementing the corresponding sessions counter(s) based on

various events (col. 9, lines 51-55).

It would have been obvious to one of ordinary skill in the art of Computer Networking at

the time of this invention to combine the teachings of Armstrong, Salas, and Troxel because

keeping track of session information and resource status are vital parts of effective server

operation.

49.   As to claim 47, Armstrong teaches a method of broadcasting said access server failure to

all session servers associated with the access server (col. 9, lines 38-47).

50.   As to claim 48, Troxel teaches a method of rejecting the user's attempt to log in if the

user's log in would cause a count of the sessions in use by the user or by a group to which the

user belongs to exceed a predetermined number of maximum sessions allowed by the session

server for the user or the group to which the user belongs (col. 10, lines 27-41).

51.   As to claim 49, Troxel teaches a method of allowing the user's attempt to log in if the

user's log in would not cause a count of the sessions in use by the user or a group to which the

user belongs to exceed a predetermined maximum number of sessions allowed by the session

server for the user or the group to which the user belongs; incrementing the corresponding

counter(s) of number of logged in sessions by one; adding the said unique identification number

to the master list (col. 10, lines 27-41).

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Armstrong, Salas

and Troxel as applied to claim 46 above, and further in view of Rai.

Armstrong, Salas, and Troxel teach the method according to claim 46; however they do

not explicitly teach forming a unique identification number by concatenating a NAS identifier

and a port identifier.

Rai teaches a method of sending access information to a server that includes the NAS

port and NAS IP address (col. 25, lines 29-57, The IP address serves as a unique identification

for the NAS.).

It would have been obvious to one of ordinary skill in the Computer Networking art to

combine the teachings of Armstrong, Salas, Troxel, and Rai to form a unique identification

number by concatenating an access server identifier with a port identifier because such an

identification number would be a logical way to provide user information without any additional

information requirements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B Blair whose telephone number is 703-305-5267. The examiner can normally be reached on 7:30am-5:00pm Mon-Thurs, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703)305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-4815 for regular communications and (703)305-4815 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Douglas Blair
May 14, 2002

LE HIEN LUU
PRIMARY EXAMINER